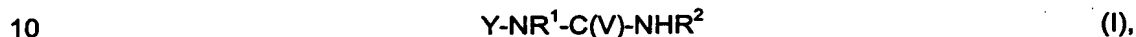


We claim:

1. A composition comprising

5 (A) copolymer of

(A-1) at least one ethylenically unsaturated, free-radically copolymerizable monomer of the formula (I)



where the substituents have the following meanings:

15  $Y$  = an ethylenically unsaturated radical capable of free-radical polymerization

$V$  = O, S or NH

$R^1, R^2$  = independently of one another H or a  $C_1$ - $C_8$ -alkyl group, or both together a bridging  $C_2$ - $C_4$ -alkylene group which may be substituted up to twice by a  $C_1$ - $C_4$ -alkoxy group and/or hydroxyl group,

20

(A-2) at least one unsaturated monomer of the formula (II)



25

where the substituents have the following meanings:

$X$  is chosen from the group of radicals  $-OH$ ,  $-OR^8$ ,  $NH_2$ ,  $-NHR^8$ ,  $N(R^8)_2$ ;

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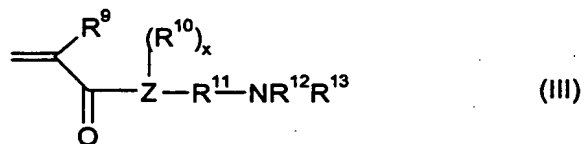
the radicals  $R^8$  may be identical or different and are chosen from the group consisting of  $-H$ ,  $C_1$ - $C_{40}$  linear- or branched-chain alkyl radicals,  $N,N$ -dimethyl-aminoethyl, 2-hydroxyethyl, 2-methoxyethyl, 2-ethoxyethyl, hydroxypropyl, methoxypropyl or ethoxypropyl;

35

$R^7$  and  $R^8$  are independently of one another chosen from the group consisting of  $-H$ ,  $C_1$ - $C_8$  linear- or branched-chain alkyl chains, methoxy, ethoxy, 2-hydroxy-ethoxy, 2-methoxyethoxy and 2-ethoxyethyl,

(B) at least one further copolymer different from (A) of

40 (B-1) at least one monomer of the formula (III)



where

$\text{R}^9$  = H, alkyl having 1 to 8 carbon atoms,

$\text{R}^{10}$  = H, methyl,

$\text{R}^{11}$  = alkylene having 1 to 24 carbon atoms, optionally substituted by  $\text{C}_1\text{--C}_6\text{--alkyl}$ ,

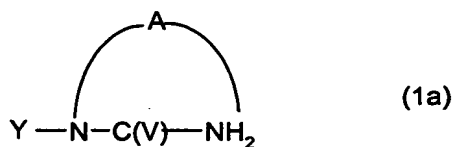
$\text{R}^{12}, \text{R}^{13}$  =  $\text{C}_1\text{--C}_{40}\text{--alkyl radical}$ ,

$\text{Z}$  = nitrogen when  $x = 1$  or oxygen when  $x = 0$ .

and

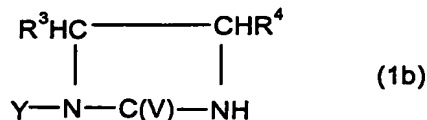
(B-2) at least one ethylenically unsaturated monomer.

2. A composition as claimed in claim 1, wherein a copolymer of at least one monomer (A-1) and at least two monomers (A-2) is used as copolymer (A).
3. A composition as claimed in claim 1, wherein a compound of the following formula (1a) is used as monomer (A-1)



where A = a 2- or 3-membered alkylene group optionally having a carbonyl group.

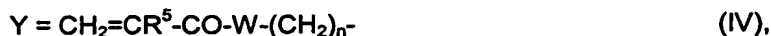
4. A composition as claimed in claim 1, wherein a compound of the formula (1b) is used as monomer (A-1)  
where  $\text{R}^3$  and  $\text{R}^4$ , independently of one another, are H, -OH, -NH,  $\text{C}_1\text{--C}_8\text{--alkyl}$ .



5. A composition as claimed in claim 4, where  $\text{R}^3$  and  $\text{R}^4 = \text{H}$ .
6. A composition as claimed in any of the preceding claims, wherein a compound in which  $\text{V} = \text{O}$  is used as monomer (A-1).

7. A composition as claimed in any of the preceding claims, wherein a compound of the formula (Ib) where  $R^3$  and  $R^4 = H$  and  $V = O$ , and  $Y = CH_2=C(CH_3)-CO-O-(CH_2)_2-$  is used as monomer (A-1).

5 8. A composition as claimed in any of the preceding claims, wherein the ethylenically unsaturated radical Y capable of free-radical polymerization is a radical of the formula (IV)



10 where

$R^5 = H, CH_3$

$W = O, NH$

$n = 2$  to 8, in particular 2 to 4.

15

9. A composition as claimed in any of the preceding claims, wherein at least one monomer which is chosen from the group consisting of N,N-dimethylaminomethyl (meth)acrylate, N,N-diethylaminomethyl (meth)acrylate, N,N-dimethylaminoethyl (meth)acrylate, N,N-diethylaminoethyl (meth)acrylate, N,N-dimethylaminopropyl (meth)acrylate, N,N-diethylaminopropyl (meth)acrylate is used as monomer (B-1).

20

10. A composition as claimed in any of the preceding claims, wherein N,N-dimethylaminopropyl (meth)acrylate is used as monomer (B-1).

25 11. A composition as claimed in any of the preceding claims, wherein a copolymer of (A-1) ureidomethacrylate and (A-2) at least 2 further monomers chosen from the group consisting of n-butylacrylate, acrylic acid and stearyl methacrylate is used as copolymer (A).

30 12. A composition as claimed in any of the preceding claims, wherein a copolymer of (B-1) N,N-dimethylaminopropyl (meth)acrylate and at least one further monomer chosen from the group consisting of n-butyl acrylate and ureidomethacrylate is used as copolymer (B).

35 13. A composition as claimed in any of the preceding claims, wherein the (molar) ratio of copolymer (A) to copolymer (B) is in the range from 1:10 to 10:1, in particular in the range from 1:5 to 5:1.

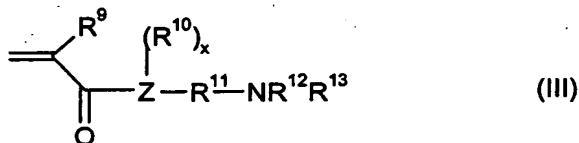
14. The use of a composition as claimed in any of the preceding claims as thickener.

40 15. The use of a composition as claimed in any of the preceding claims as conditioning agent.

16. The use of a composition as claimed in any of the preceding claims in cosmetic preparations.

17. A copolymer (B) of

(B-1) at least one monomer of the formula (III)



in which

**R<sup>9</sup> = H, alkyl having 1 to 8 carbon atoms,**

$R^{10} = H, \text{ methyl,}$

**R<sup>11</sup>** = alkylene having 1 to 24 carbon atoms, optionally substituted by C<sub>1</sub>-C<sub>6</sub>-alkyl,

$$R^{12}, R^{13} = C_1-C_{40}\text{-alkyl radical,}$$

**Z** = nitrogen when  $x = 1$  or oxygen when  $x = 0$ .

**and**

**(B-2) at least one ethylenically unsaturated monomer.**

- 18. The use of a copolymer (B) as claimed in claim 17 in cosmetic preparations.**

- 20 19. The use of a copolymer (B) as claimed in claim 17 as thickener.

20. A method of thickening cosmetic preparations in which 1 to 30% by weight, in particular 5 to 25% by weight, preferably 8 to 20% by weight, of a composition as claimed in claim 1 are added to the preparation to be thickened.

25

## Abstract

The invention relates to compositions comprising at least one copolymer (A) and at least one copolymer (B), and to the use thereof in cosmetic preparations.

5

Composition comprising

(A) copolymer of

10 (A-1) at least one ethylenically unsaturated, free-radically copolymerizable monomer of the formula (I)



15

where the substituents have the following meanings:

Y = an ethylenically unsaturated radical capable of free-radical polymerization

V = O, S or NH

20  $R^1, R^2 =$  independently of one another H or a  $C_1-C_8$ -alkyl group, or both together a bridging  $C_2-C_4$ -alkylene group which may be substituted up to twice by a  $C_1-C_4$ -alkoxy group and/or hydroxyl group,

(A-2) at least one unsaturated monomer of the formula (II)

25



where the substituents have the following meanings:

30 X is chosen from the group of radicals  $-OH$ ,  $-OR^8$ ,  $NH_2$ ,  $-NHR^8$ ,  $N(R^8)_2$ ;

the radicals  $R^8$  may be identical or different and are chosen from the group consisting of  $-H$ ,  $C_1-C_{40}$  linear- or branched-chain alkyl radicals, N,N-dimethyl-aminoethyl, 2-hydroxyethyl, 2-methoxyethyl, 2-ethoxyethyl, hydroxypropyl, methoxypropyl or ethoxypropyl;

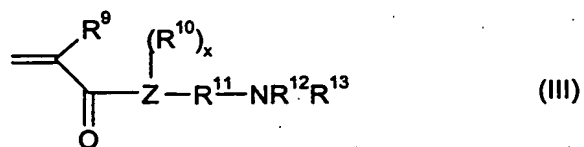
35

$R^7$  and  $R^8$  are independently of one another chosen from the group consisting of  $-H$ ,  $C_1-C_8$  linear- or branched-chain alkyl chains, methoxy, ethoxy, 2-hydroxy-ethoxy, 2-methoxyethoxy and 2-ethoxyethyl.

40

(B) at least one further copolymer different from (A) of

(B-1) at least one monomer of the formula (III)



where

$\text{R}^9$  = H, alkyl having 1 to 8 carbon atoms,

$\text{R}^{10}$  = H, methyl,

$\text{R}^{11}$  = alkylene having 1 to 24 carbon atoms, optionally substituted by  $\text{C}_1\text{--C}_6$ -alkyl,

$\text{R}^{12}, \text{R}^{13}$  =  $\text{C}_1\text{--C}_{40}$  alkyl radical,

$\text{Z}$  = nitrogen when  $x = 1$  or oxygen when  $x = 0$

and

(B-2) at least one ethylenically unsaturated monomer.